I claim:

1. A jack plate for a marine propulsion system, comprising:

a first member which is attachable to a marine vessel;

a second member which is supported by said first member and movable relative to said first member; and

a hydraulic cylinder, having a piston rod disposed at least partially therein, attached between said first and second members, whereby movement of said piston rod relative to said hydraulic cylinder causes said second member to move relative to said first member, said hydraulic cylinder being detachable from said first member while said second member remains supported by said first member.

2. The jack plate of claim 1, further comprising:

a mechanical stop device attached to said first member to prevent said second member from moving beyond a preselected location relative to said first member when said hydraulic cylinder is detached from said first member.

3. The jack plate of claim 2, wherein:

said mechanical stop device is disposed in threaded engagement within a hole formed in said first member.

4. The jack plate of claim 1, wherein:

said first member comprises a removable bracket member, said hydraulic cylinder being attached to said removable bracket member.

5. The jack plate of claim 1, further comprising:

a hydraulic pump connected in fluid communication with said hydraulic cylinder.

6. The jack plate of claim 5, further comprising:

a motor connected in torque transmitting relation with said hydraulic pump.

7. The jack plate of claim 6, wherein:

said hydraulic pump and said motor are attached for support to said first member.

8. The jack plate of claim 1, further comprising:

a manually activated pressure relief valve connected in fluid communication with said hydraulic cylinder.

9. The jack plate of claim 8, wherein:

said manually activated pressure relief valve is accessible through an opening in said first member.

10. The jack plate of claim 1, further comprising:

an automatically activated pressure relief valve which is connected in fluid communication with said hydraulic cylinder, said automatically activated pressure relief valve being configured to allow hydraulic fluid to return from said hydraulic cylinder to said hydraulic pump when said piston rod is extended from said hydraulic cylinder by a preselected amount.

11. The jack plate of claim 1, wherein:

said first member comprises a first rail device; and

said second member comprises a second rail device, said first and second rail devices being associated together to allow said second member to slide relative to said first member.

12. The jack plate of claim 1, wherein:

said hydraulic cylinder is detachable from said first member by detaching said removable bracket member from said first member.

13. A jack plate for a marine propulsion system, comprising:

a first member which is attachable to a marine vessel, said first member comprising a removable bracket member;

a second member which is supported by said first member and movable relative to said first member; and

a hydraulic cylinder, having a piston rod disposed at least partially therein, attached between said first and second members, whereby movement of said piston rod relative to said hydraulic cylinder causes said second member to move relative to said first member, said hydraulic cylinder being detachable from said first member while said second member remains supported by said first member, said hydraulic cylinder being attached to said removable bracket member.

14. The jack plate of claim 13, further comprising:

a mechanical stop device attached to said first member to prevent said second member from moving beyond a preselected location relative to said first member when said hydraulic cylinder is detached from said first member.

15. The jack plate of claim 14, wherein:

said mechanical stop device is disposed in threaded engagement within a hole formed in said first member.

16. The jack plate of claim 13, further comprising:

a hydraulic pump connected in fluid communication with said hydraulic cylinder; and

a motor connected in torque transmitting relation with said hydraulic pump.

17. The jack plate of claim 16, wherein:

said hydraulic pump and said motor are attached for support to said first member.

18. The jack plate of claim 17, further comprising:

a manually activated pressure relief valve connected in fluid communication with said hydraulic cylinder, said manually activated pressure relief valve being accessible through an opening in said first member.

19. The jack plate of claim 18, further comprising:

an automatically activated pressure relief valve which is connected in fluid communication with said hydraulic cylinder, said automatically activated pressure relief valve being configured to allow hydraulic fluid to return from said hydraulic cylinder to said hydraulic pump when said piston rod is extended from said hydraulic cylinder by a preselected amount.

20. The jack plate of claim 13, wherein:

said first member comprises a first rail device; and

said second member comprises a second rail device, said first and second rail devices being associated together to allow said second member to slide relative to said first member.

21. The jack plate of claim 13, wherein:

said hydraulic cylinder is detachable from said first member by detaching said removable bracket member from said first member.

22. A jack plate for a marine propulsion system, comprising:

a first member which is attachable to a marine vessel, said first member comprising a removable bracket member;

a second member which is supported by said first member and movable relative to said first member; and

a hydraulic cylinder, having a piston rod disposed at least partially therein, attached between said first and second members, whereby movement of said piston rod relative to said hydraulic cylinder causes said second member to move relative to said first member, said hydraulic cylinder being detachable from said first member while said second member remains supported by said first member, said hydraulic cylinder being attached to said removable bracket member;

a mechanical stop device attached to said first member to prevent said second member from moving beyond a preselected location relative to said first member when said hydraulic cylinder is detached from said first member;

a hydraulic pump connected in fluid communication with said hydraulic cylinder, said hydraulic pump and said motor being attached for support to said first member; and

a motor connected in torque transmitting relation with said hydraulic pump.

23. The jack plate of claim 22, wherein:

said mechanical stop device is disposed in threaded engagement within a hole formed in said first member.

24. The jack plate of claim 22, further comprising:

a manually activated pressure relief valve connected in fluid communication with said hydraulic cylinder, said manually activated pressure relief valve being accessible through an opening in said first member.

25. The jack plate of claim 22, further comprising:

an automatically activated pressure relief valve which is connected in fluid communication with said hydraulic cylinder, said automatically activated pressure relief valve being configured to allow hydraulic fluid to return from said hydraulic cylinder to said hydraulic pump when said piston rod is extended from said hydraulic cylinder by a preselected amount.

26. The jack plate of claim 22, wherein:

said first member comprises a first rail device; and

said second member comprises a second rail device, said first and second rail devices being associated together to allow said second member to slide relative to said first member.

27. The jack plate of claim 22, wherein:

said hydraulic cylinder is detachable from said first member by detaching said removable bracket member from said first member.